

AMENDED CLAIMS

1. (Currently Amended) A night light for use in conjunction with an associated plumbing fixture including a spout and a handle for controlling a water flow from the spout, the night light comprising:

an LED arrangement comprising at least one LED disposed on or in the associated plumbing fixture for directly illuminating at least one of the handle, the water flow, and an associated basin; and

a hermetic sealant that seals the LED arrangement against contact with water.

2. (Currently Amended) ~~The A night light as set forth in claim 1, further including for use in conjunction with an associated plumbing fixture including a spout and a handle for controlling a water flow from the spout, the night light comprising:~~

an LED arrangement comprising at least one LED disposed on or in the associated plumbing fixture for directly illuminating at least one of the handle, the water flow, and an associated basin; and

a switch operatively communicating with the handle, the switch selectively energizing the LED arrangement responsive to a position of the handle.

3. (Original) The night light as set forth in claim 1, further including:

a switch that electrically energizes the LED arrangement conditional upon a presence of a pre-selected flow of water from the spout.

4. (Currently Amended) ~~The night light as set forth in claim 1~~ claim 2, further including wherein the switch includes:

a control circuit that communicates with the handle and the LED arrangement to provide variable illumination responsive to a degree of opening of the handle.

5. (Currently Amended) ~~The A night light as set forth in claim 1, wherein the LED arrangement includes for use in conjunction with an associated plumbing fixture including a spout and a handle for controlling a water flow from the spout, the night light comprising:~~

an LED arrangement comprising

a first color LED that emits light having a first color~~[[;]]~~, and
a second color LED that emits light having a second color,
disposed on or in the associated plumbing fixture for directly illuminating at least one of
the handle, the water flow, and an associated basin.

6. (Original) The night light as set forth in claim 5, further including:
a temperature sensor for producing an output indicative of a temperature
of the water flow, the temperature sensor modulating an intensity of the first color LED
and an intensity of the second color LED responsive to the temperature of the water
flow.

7. (Canceled)

8. (Currently Amended) ~~The A night light as set forth in claim 7, for use in
conjunction with an associated plumbing fixture including a spout and a handle for
controlling a water flow from the spout, the night light comprising:~~

an LED arrangement comprising at least one LED disposed on or in the
associated plumbing fixture for directly illuminating at least one of the handle, the water
flow, and an associated basin; and

a sensor that produces at least one output characteristic of at least one of:

a temperature of the externally accessible fluid flow,

a flow rate of the externally accessible fluid flow,

a position of a handle that controls the externally accessible fluid
flow, and

an ambient light intensity,

wherein the controller effectuates a warning modulation of the LED arrangement
responsive to an output of the sensor unit outside of a selected range.

9. (Previously Presented) The night light as set forth in claim 8, wherein
the warning modulation includes a blinking of at least one element of the LED
arrangement.

10. (Canceled)

11. (Currently Amended) ~~The A night light as set forth in claim 1, further~~

including for use in conjunction with an associated plumbing fixture including a spout and a handle for controlling a water flow from the spout, the night light comprising:

an LED arrangement comprising at least one LED disposed on or in the associated plumbing fixture for directly illuminating at least one of the handle, the water flow, and an associated basin;

a substrate on which the LED arrangement is disposed; and

an encapsulant that encapsulates the LED arrangement and at least a portion of the substrate.

12. (Original) The night light as set forth in claim **11**, wherein the substrate includes a circuit board having electrical traces for electrically communicating with the LED arrangement.

13. (Original) The night light as set forth in claim **12**, further including:

an ambient light sensor arranged on the circuit board and encapsulated by the encapsulant, the ambient light sensor electrically communicating with the LED arrangement to operate the LED based upon an ambient light sensor output.

14. (Original) The night light as set forth in claim **1**, wherein the plumbing fixture includes one of a faucet and a showerhead.

15. (Currently Amended) ~~The A~~ night light as set forth in claim ~~1~~, wherein ~~the LED arrangement includes~~ for use in conjunction with an associated plumbing fixture including a spout and a handle for controlling a water flow from the spout, the night light comprising:

an LED arrangement comprising at least one an LED disposed on the handle of the associated plumbing fixture for directly illuminating at least one of the handle, the water flow, and an associated basin.

16. (Original) The night light as set forth in claim **1**, wherein the LED arrangement includes:

an LED disposed near the handle.

17. (Currently Amended) The night light as set forth in ~~claim 1~~ claim 18, wherein the LED arrangement includes:

an LED disposed in the handle, said handle being light transmissive.

18. (Currently Amended) ~~The A~~ night light ~~as set forth in claim 1, wherein the LED arrangement includes~~ for use in conjunction with an associated plumbing fixture including a spout and a handle for controlling a water flow from the spout, the night light comprising:

an LED arrangement comprising at least one an LED embedded in a light-transmissive portion of the plumbing fixture for directly illuminating at least one of the handle, the water flow, and an associated basin.

19. (Currently Amended) ~~The A~~ night light ~~as set forth in claim 1, wherein the LED arrangement includes~~ for use in conjunction with an associated plumbing fixture including a spout and a handle for controlling a water flow from the spout, the night light comprising:

an LED arrangement comprising at least one an LED arranged on the spout of the associated plumbing fixture to illuminate the water flow.

20. (Original) The night light as set forth in claim 19, wherein the LED arrangement includes:

a detachable lower plate of the spout on which the at least one LED is arranged.

21. (Original) A plumbing fixture comprising:

a showerhead or a faucet, the showerhead or faucet including a water outlet for emitting a water flow and a handle for controlling the water flow;

at least one LED arranged on or in the showerhead or faucet and viewable by an associated user of the plumbing fixture;

a light-transmissive encapsulant that seals the at least one LED and transmits light produced by the at least one LED to the associated user; and

a controller producing a controller output for controlling the LED light emission responsive to at least one of a water flow rate, a water flow temperature, an ambient light level, and a position of the handle.

22. (Original) The plumbing fixture as set forth in claim 21, further including:

one of a battery pack and a class II transformer arranged to power the at least one LED and the controller.

23. (Original) The plumbing fixture as set forth in claim **21**, further including:

a printed circuit board on which the at least one LED is disposed, the printed circuit board including conductive traces operatively interconnecting the LED with the controller.

24. (Original) The plumbing fixture as set forth in claim **23**, further including:

electrical power conditioning circuitry arranged on the printed circuit board for conditioning electrical power supplied to the at least one LED.

25. (Original) The plumbing fixture as set forth in claim **21**, wherein the controller includes one of:

a switch operatively connected with the handle and producing an output responsive to a position of the handle,
a flow sensor communicating with the water flow,
a temperature sensor thermally communicating with the water flow, or
a light sensor optically communicating with the ambient.

26. (Original) The plumbing fixture as set forth in claim **23**, wherein the at least one LED further includes:

a plurality of LEDs cooperating with the controller to emit light including at least one of two or more colors of light responsive to the controller output.

27. (Previously Presented) A lamp adapted for arrangement on a faucet or showerhead including a spout and at least one handle for controlling a water flow out of the spout, the lamp comprising:

a printed circuit board with conductive traces arranged thereon;
an LED source including at least one LED arranged on the printed circuit board and electrically powered via the conductive traces; and
a light-transmissive encapsulant sealing the LED source and the conductive traces, wherein the encapsulant defines a selected shape adapted for

arrangement on the faucet.

28. (Canceled)

29. (Original) The lamp as set forth in claim **27**, wherein the encapsulant defines an annular or slotted form adapted for arrangement on a shaft on which the handle is disposed.

30. (Original) The lamp as set forth in claim **27**, further including:
a light sensor arranged on the printed circuit board and encapsulated by the light-transmissive encapsulant, the photosensor optically communicating with the ambient and electrically communicating with the LED source to activate the LED source conditional upon a low ambient lighting criterion.

31. (Original) The lamp as set forth in claim **27**, further including:
a battery pack adapted to transmit power supplied by an associated battery to power the LED source.

32. (Original) The lamp as set forth in claim **27**, further including:
an inductively rechargeable battery electrically arranged to power the LED source.

33. (Original) The lamp as set forth in claim **27**, further including:
electrical leads adapted to receive power from a class II power supply for powering the LED source.

34. (Original) The lamp as set forth in claim **27**, further including:
a fastener attached to at least one of the printed circuit board and the light-transmissive encapsulant, the fastener adapted to detachably connect with the faucet or showerhead.

35. (Original) The lamp as set forth in claim **34**, wherein the fastener includes a clamp adapted to detachably clamp onto a pipe on which the showerhead is disposed.